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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,734	09/30/2004	Lee George LABORCZFALVI	2006579-0244 (CXT-110)	5733
69665 7590 08/17/2009 CHOATE, HALL & STEWART / CITRIX SYSTEMS, INC. TWO INTERNATIONAL PLACE BOSTON, MA 02110			EXAMINER WEI, ZHENG	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 08/17/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/711,734	Applicant(s) LABORCZFALVI ET AL.	
	Examiner ZHENG WEI	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. This office action is in response to the amendment filed on 05/26/2009.
2. Claim 1 has been amended.
3. The 35 U.S.C. 112 second paragraph rejections to claims 1-13 are withdrawn in view of the Applicant's amendment.
4. Claims 1-16 and 18-22 remain pending and have been examined.

Response to Arguments

5. Applicant's arguments filed on 05/26/2009, in particular on pages 6-8, have been fully considered but they are not persuasive. For example:
 - At page 7, first paragraph, the Applicants submit that "The Applicants have explicitly defined these terms as they appear in the claims" ("application isolation layer" and "user isolation layer"). However, Examiner's position is that applicants merely disclose what functions the application isolation layer and user isolation layer provide and perform in the specification, but does not explicitly define in the claims regarding the definition of these terms. Moreover, the claim language only recites an isolation environment including the application isolation layer and user isolation layer without further defining any steps or functions to be performed in the claims relate/interact to those isolation layers. Therefore, a reasonable broad interpretation of the execution environment (isolation environment) as recited in claim 1 is as the same as the

Demsey disclosed execution environment which includes different isolation layers to handle use applications with user code, and resource allocation with managed code and native code (see for example, Fig.1 and related text).

- At page 7, second paragraph, the Applicants submit that “this is a different usage of the term than the one defined by the Applicants, and as such, Demsey does not teach or suggest a user isolation layer. Furthermore, applications in Demsey are not isolated from each other, but rather share the same native resources”. Examiner would like to thank the Applicants for pointing out the details and difference between the Demsey and applicants’ specification. However, it should be noted that claim language does not explicitly define the terms “application isolation layer” and “user application layer” and how their structures and functions relate to perform the steps (receiving, determining, forming and issuing) as the Applicants claimed in claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demsey (Demsey et al., US 7,203,941) in view of Goldberg (Robert Goldberg, US 4,253,145)

Claim 1:

Demsey discloses a method for virtualizing access to native resources provided by an operating system, the method comprising:

- receiving a request to access a native resource provided by an operating system from a process executing in the context of an isolation environment including an application isolation layer (managed code portion) and a user isolation layer (user code), the request including a virtual name for the native resource (see for example, Fig.3, step 300, “Application Executing In Virtual Machine makes A Request in Managed Code For Native Resource Access”; also see Fig.1 User code, managed code portion and related text) ;
- determining that a rule action specifying remap is associated with the virtual name included in the received request; forming a literal name for the native resource, the literal name identifying a literal native resource of the same type as the requested resource (see for example, Fig.1, item 108, 114 and 726 “Operating System”, “Native Resource Handle Table”, “Resource Allocation and Collection Modules(s)” and related text; also see Fig.2, “Native Resource Handle Tables”; further see Fig.3, steps 304-310 and related text) ; and

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- issuing to the operating system a request to access the native resource, the request including the determined literal name for the native resource (see for example, Fig.1, item 726 “Operating System”, item 114 “Native Resource Handle Table” and item 702 “hardware”; also see Fig.3, steps 312-314, “Access for requested Native Resource...”).

Demsey also discloses determining a rule action to use handler table to allocate or reallocate (mapping) when executing application requests a native resource (see for example, col.4, lines 11-39)

But does not explicitly disclose detailed information about a rule action of remap.

However, Goldberg in the same analogous art of supporting recursive virtual computer system, discloses using Ø-map and f-map to map virtual resource name and real resource name (see for example, Fig.6a and related text).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Goldberg's method to validate and remap a virtual name with a real resource name. One would have been motivated to do so to support several copies of the basic machine interface, and then different privileged software could be run on each of the additional basic machine interfaces simultaneously as suggested by Goldberg (see for example, col.2, lines 37-45)

Claim 2:

Demsey and Goldberg disclose the method of claim 1, Demsey further discloses wherein receiving a request to access a native resource, comprises receiving a request from a process executing in the context of an isolation environment (virtual environment) to access a named system object, the request including a virtual name for the system object (see for example, Fig.3, step 300 and related text).

Claim 3:

Demsey further discloses the method of claim 2 wherein forming a literal name further comprises:

determining a rule associated with the virtual name included in the received request (see for example, Fig.6, step 618, "Is Obj(i) Referenced By Applicant(k)..."); and using the determined rule to form a literal name for the system object that identifies a literal system object (see for example, Fig.3, steps 310-314, "Assign Name and Address for requested Native Resource To Obj(i) Entry in Native Resource Handle Table" and related text).

Claim 4:

Demsey and Goldberg disclose the method of claim 1, Demsey further discloses wherein receiving a request to access a native resource comprises receiving a request from a process executing in the context of an isolation environment to access a file system element, the request including a virtual name for the file

system element Fig.3, step 300, “Application Executing in Virtual Machine Makes A Request in Managed Code for Native Resource Access” and related text).

Claim 5:

Demsey further discloses the method of claim 4 wherein forming a literal name further comprises:

(c-1) determining a rule associated with the virtual name included in the received request (see for example, Fig.6, step 618, “Is Obj(i) Referenced By Applicant(k)...”);; and

(c-2) using the determined rule to form a literal name for the file system element that identifies a literal file system element (see for example, Fig.3, steps 310-314, “Assign Name and Address for requested Native Resource To Obj(i) Entry in Native Resource Handle Table” and related text).

Claim 8:

Demsey and Goldberg disclose the method of claim 1, Demsey further discloses wherein receiving a request to access a native resource comprises receiving a request from a process executing in the context of an isolation environment to access one of a window and a window class, the request including one of a virtual name for the window and a virtual name for the window class (see for example, Fig.1, item 106, “Base Class Library” and related text).

Claim 9:

Demsey also discloses the method of claim 8 wherein forming a literal name further comprises: determining a rule associated with the virtual name included in the received request (see for example, Fig.6, step 618, "Is Obj(i) Referenced By Applicant(k)..."); and using the determined rule to form a literal name for the one of a virtual name for the window and a virtual name for the window class that identifies one of a literal window name and a literal window class (see for example, Fig.3, steps 310-314, "Assign Name and Address for requested Native Resource To Obj(i) Entry in Native Resource Handle Table" and related text).

Claim 10:

Demsey and Goldberg disclose the method of claim 1, Goldberg discloses wherein forming a literal name further comprises: accessing a rules engine to determine a rule associated with the virtual name received in the request (see for example, Fig.6a, step 601 and related text); and forming a literal name for the native resource responsive to the determined rule, the formed literal name identifying a literal native resource of the same type as the requested resource (see for example, steps 601-611, "R is the Real Resource" and related text) .

Claim 11:

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Demsey and Goldberg disclose the method of claim 1, Demsey further discloses the method comprising receiving a handle from the operating system identifying the accessed object (see for example, Fig.3, step 306 “Review Native Resource Handle Tables for availability of Handle for requested Native Resource” and related text) .

Claim 12:

Demsey further discloses the method of claim 11 further comprising transmitting the handle to the process (see for example, Fig.3, step 310, “Assign Name and Address for Requested Native Resource to Obj(i) Entry in Native Resource Handle Table” and related text).

Claim 13:

Demsey and Goldberg disclose the method of claim 1, Goldberg discloses wherein forming a literal name further comprises determining, by the remap rule, the literal name of the native resource for the virtual name of the native resource (see for example, Fig.6a and related text about “Ø-map” and “f-map”).

8. Claims 6-7, 14-16 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demsey (Demsey et al., US 7,203,941) in view of Goldberg (Robert Goldberg, US 4,253,145) in further view of Schmidt (Brian Keith Schmidt, US 7,206,819)

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Claim 6:

Demsey and Goldberg disclose the method of claim 1, Demsey further discloses wherein receiving a request to access a native resource comprises receiving a request from a process executing in the context of an isolation environment to access native resource (see for example, Fig.3, step 300, "Application Executing In Virtual Machine makes A Request in Managed Code For Native Resource Access" and related text). But does not explicitly disclose the native resource includes a registry key and the request including a virtual name for the registry key. However, Schmidt in the same analogous art of method and apparatus for providing virtual namespaces for active computing environments, discloses using virtual name (virtual namespaces) to access registry key (file system) (see for example, col.3, lines 20-30, "The underlying file system is mapped into the compute capsule in a port of the capsule called a 'virtual namespace'").

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a virtual name to access native resource including file system/registry key. One would have been motivated to do so to provides a private, customizable view of shared file system as suggested by Schmidt (see for example, col.3, lines 20-22, "using the compute capsule, one embodiment of the present invention provides a private, customizable view of a shred file system...")

Claim 7:

Demsey, Goldberg and Schmidt disclose the method of claim 6, Schmidt further discloses wherein forming a literal name further comprises: determining a rule associated with the virtual name included in the received request (see for example, Figure 6, step 630, "Is capsule naming a resource?" and related text); and using the determined rule to form a literal name for the registry key that identifies a literal registry key (see for example, Figure 6, step 640, "Use translator to translate the named resource in the personal namespace to the actual physical resource" and related text).

Claims 14-16 and 18-22:

Claims 14-16 and 18-22 are apparatus version for performing the claimed method as in claims 1-13 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above and certainly a computer apparatus would need to run and/or practice such function steps disclosed by reference above. Thus, they also would have been obvious.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's arguments with respect to claims rejection have been considered but are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. W./
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192